

1. An article of manufacture, comprising:  
a linear copolymer of ethylene and vinyl aromatic monomer having a molecular weight of less than 15,000, wherein the copolymer is characterized by a backbone having a first and second terminal end group, the first terminal end group is a methyl group, the second terminal end group is a vinyl group, wherein the ratio of the terminal methyl group to the terminal vinyl group is in the range from 0.8:1 to 1:0.8.
3. The article of manufacture of claim 1, wherein the backbone of the copolymer is substantially free of a vinylidene group.
4. The article of manufacture of claim 1, wherein the article is a wax.
5. The article of manufacture of claim 1, wherein the article is a hot melt adhesive.
6. The article of manufacture of claim 1, wherein the article is an electrostatic toner.
7. The article of manufacture of claim 1, wherein the article is a lubricant.
8. The article of manufacture of claim 1, wherein the copolymer includes a functional group.
9. The article of manufacture of claim 8, wherein the functional group is a halogen hydroxyl, anhydride, amine, amide, carboxylic acid, ester, ether, or nitrile group.
10. A method of functionalizing a polymer, comprising:  
obtaining a linear copolymer of ethylene and vinyl aromatic monomer having a molecular weight of less than 15,000, the copolymer being characterized by a backbone having a first and second terminal end group, the first terminal end group being a methyl group, the second terminal end group being a vinyl group, wherein the ratio of the terminal methyl group to the terminal vinyl group is 0.8:1 to 1:0.8; and effectuating functionalization of the vinyl group to make a functionalized copolymer.
11. The method of claim 10, wherein the functionalization is chlorination.
12. The method of claim 10, wherein the functionalization is epoxidation.

Replacement page 66

HOUSTON 300814V1 43225-62465AWOP

1-06-2004

SENT BY:

6-11- 4 ; 8:39AM ; JENKENS & GILCHRIST-

US0310844

+49 89 23994465;#12/12

13. The method of claim 10, wherein the functionalization is oxidation.
14. The method of claim 10, wherein the functionalization is carboxylation.
15. The method of claim 10, wherein the functionalization is sulfonation.

Replacement page 67

HOUSTON 300814v1 43223-62465AWOP

Empf.zeit: 11/06/2004 16:47

AMENDED SHEET 337 P.012

Best Available Copy